you've got three already.

A. The symptoms.

Q. Symptoms.

A. Now the signs. We need two of the categories for signs. And look at my exam. Yes. Some swelling noted in the right dorsal forearm. So that's pseudomotor edema, positive edema or swelling on the exam.

Then I say subtle skin changes on my exam. That's the vasomotor sign. And the tenderness I would call with the hyperalgesia would be one of them. You need only two. So she has two of the signs already.

MR. KRAEUTER: Two or three?

THE WITNESS: She has definitely two. Two is necessary for a diagnosis. She has, from my exam, reports of skin changes, asymmetry with edema. So she has two signs that I need. And then the last criteria, of course, there's no diagnosis that better explains the signs and symptoms.

Q. (By Mr. Meader) Okay. Well, let's talk about that.

A. Yeah.

Q. So there was -- let's get back. We went

51:13 through a list of things here that was in this
51:16 article. Did you do a full blood count?
51:28 A. No.
51:28 Q. Did you do a C reactive protein?
51:31 A. No.
51:31 Q. Did you do an erythrocyte sedimentation
51:36 rate?
51:36 A. No.
51:37 Q. Sero autoantibody?
51:38 A. No.
51:39 Q. What about cellulitis or arthritis?
51:49 A. Cellulitis was per my clinical judgment
51:53 not present. Cellulitis means, in layman's terms, an
51:58 infection of the skin.
51:59 Q. Okay. Arthritis?
52:01 A. Arthritis would be No. 1. Typically, you
52:09 know, she has seen two orthopedic specialists before.
52:14 She had X-rays done. And also arthritis in the
52:16 forearm. There's no choice in the forearm, in that
52:22 area, in the midforearm. So arthritis could be at
52:24 the wrist joint, at the fingers or at the elbow. But
52:28 arthritis is not account for the findings in my exam.
52:33 Q. Okay. Did you do any duplex scanning?
52:37 A. I did not.
52:38 Q. To exclude a deep vein thrombosis?

52:41 A. I did not. I clinically did not feel that
52:43 I had a suspicion based on the presentation in the
52:46 exam and the time line of the symptoms.
52:48 Q. Okay. Why is that?
52:50 A. With a blood clot in the upper extremity,
53:02 I would expect typically that there is either a
53:14 different type of pain with it. It just clinically
53:17 did not sound -- No. 1, it's rare to have upper
53:20 extremity blood clots. She's had the symptoms for
53:27 half a year. I just clinically did not feel there
53:34 was a DVT present.
53:36 Q. Any other reasons as to why you felt there
53:39 was not a DVT present? Or is that it?
53:43 A. The typical DVTs in the upper extremity
53:46 are more in the arm area, upper arm area. Not in the
53:56 forearm area.
53:56 Q. Okay. So there was an EMG done?
54:06 A. The patient had an EMG and a nerve
54:09 conduction study done at an off-site facility prior
54:13 to seeing me, yes.
54:15 Q. And an MRI was done as well?
54:18 A. I believe she had already two MRIs when
54:23 she came to me. One of the right upper extremity and
54:25 one of the cervical spine.
54:25 Q. Okay. Now, a thermograph was not used?

54:27 A. No.
54:28 Q. Do you have a thermograph?
54:31 A. No.
54:41 Q. And there was no duplex ultrasound being done?
54:45 A. No.
54:45 Q. But in looking at this and looking at your notes, it looks like at this time you did not diagnose her with CRPS. And I'm just reading from your note under assessment, it says, second sentence, "She may be suffering from CRPS type of syndrome status post a door frame falling on her forearm in April of 2015."
55:24 A. Correct.
55:25 Q. So my take it on was at that point in time, you were not convinced that it was CRPS?
55:31 A. No. At that point in time, I was just going to make sure there's not anything else going on, excluding any other factors or any other reasons that she could have that and just get an overall picture as well. I just didn't want her labeled with CRPS immediately. I just wanted to make sure that there's nothing else that would explain this.
55:59 Q. But you did not tell her at that point in time that you thought she had CRPS?

A. I told her, yes. I told her that it might be CRPS.

Q. But at that time, it sounds like you weren't convinced that's what it was?

A. It's not that I wasn't convinced. It's just that sometimes with CRPS, you have several clinic visits.

Q. Uh-huh.

A. And not only one-time visit.

Q. Okay. So -- I'm sorry.

A. And you just, when they excluded is there anything else going on, could there be something different. Due diligence is the medical standard. And I did not feel I wanted to label her my first visit with CRPS because CRPS is a diagnosis of exclusion.

Q. So at that point in time, at least, you weren't comfortable diagnosing her with CRPS because you were still doing your due diligence and ruling out other things. Is that what I'm hearing?

A. I was doing my due diligence, correct, and did not want to label her with having CRPS; correct.

Q. Okay. But you had --

A. Not the diagnosis of CRPS; correct.

Q. You had not diagnosed her with CRPS at

that point in time, it sounds like. It sounds like, correct me if I'm wrong, but it sounds like you wanted to do more due diligence, maybe see her again before you said or labeled her with CRPS?

MR. KRAEUTER: Objection to form.

A. It looked like CRPS to me. It felt like CRPS to me. I just met her for the first time and I did feel that see her back, let's go over this again and let's find out if there's anything else that could be causing this.

I did not, I did not on 10/27/16 go over the form with her or even in my note. I did not count up if this CRPS or not because at that moment, I just wanted to see what we can do. And looking back, she fulfilled the criteria on her first visit already, but I didn't calculate all the criteria.

So I did not say you have CRPS, I'm classifying you with CRPS. I did not say, oh, you do not have CRPS. This was just the initial visit for evaluation and I did not want to put a label on her, okay, this is CRPS.

Q. Also, on 10/27 of 2015, you did not diagnose her with CRPS?

MR. KRAEUTER: Object to form.

A. I diagnosed her with --

Q. (By Mr. Meader) I understand that going back in hindsight --

A. No, no, no. I diagnosed her with a she may be suffering from CRPS type of syndrome.

Q. But you did not diagnose her with CRPS; correct?

MR. KRAEUTER: Object to the form.

A. I believe that's a -- it's a semantic difference that we're talking about.

Q. (By Mr. Meader) Well, what I'm getting at is the point in time -- because the records, they kind of speak for themselves here, but they -- you know, what I'm trying to go t is when you say diagnose, when you say, hey, this is CRPS. And here, your words are that she may be suffering from CRPS type of syndrome. It doesn't say diagnosis and plan, CRPS Type 1. It doesn't say that.

And what I'm trying to get to, I guess, is we're talking about this sensitivity versus specific distinction earlier. And at this point in time, maybe you were still concerned, you know -- the sensitivity was satisfied. You have the 200 out of a thousand. You felt like maybe, you know, she had it, but you were worried about specificity at this point in time and not using a false positive. Is that what

you were trying to say?

MR. KRAEUTER: Object to form.

A. No. I didn't think it -- the way you're saying is no. I just -- I did not think what sensitivity was specificity at that moment. The point was to just get an overall feel for the evaluation for the impression. The treatment I proposed was like it is for CRPS. So I've been down the pathway. And I just also wanted to clarify with myself is there anything that we're missing.

Q. What could that have been? What other kinds of things were you worried, I guess, you could have been missing?

A. Well, could there be anything in the neurologic system going on. For example, because she did report some neurological systems as well that I do not see frequently associated with CRPS.

Q. Have you ever seen those associated with CRPS?

A. No. I've seen patients report symptoms that are -- that don't fit the picture and so they might be a separate entity. There might be something different that has nothing to do with the CRPS. A lot of times patients with CRPS have some other symptoms that are not part of the CRPS and are still

present. So I just want to make sure that there is nothing else going on.

Q. Okay.

MR. KRAEUTER: We've been going about two hours. Can we take a little break?

MR. MEADER: Oh, yeah, sure, yeah. That's fine.

(Recess from 6:18 p.m. to 6:23 p.m.)

Q. (By Mr. Meader) All right. Did you test her grip strength at all in your examination?

A. I did not. I don't think I reported it in my note. I can't say. I'm sure I asked her to just make a fist with my finger in it to see, but I did not document it.

Q. Okay. Now, let's talk about the medications.

A. Sure.

Q. You went over her medications, what she was taking. And I think you may have prescribed something new?

A. Yes.

Q. Just kind of take me through all that in your own words, if you wouldn't mind.

A. Okay. Okay. I switched her over -- well, I continued her on the gabapentin that she was

already on for neuropathic-type pain. I added on Cymbalta at 30 milligrams. It was supposedly for two weeks, and then I wanted her to increase to 60 milligrams.

And I switched her from hydrocodone to the Percocet, which is the oxycodone, since I believe she told me that that worked better before. She had some benefits of the hydrocodone before, yes.

And I started her on Meloxicam, 5 milligrams once a day. And she was on Ibuprofen 800 milligrams on and off since April.

Q. All right. So the Cymbalta, is there a generic Cymbalta?

A. Yes.

Q. Okay.

A. Called duloxetine.

Q. Okay. So the 30 milligrams, is that the smallest dosage that that comes in?

A. It comes in 20 milligrams, 30 milligrams and 60 milligrams.

Q. What is that designed to treat, the Cymbalta?

A. Cymbalta has a lot of indications. Most people know it as an antidepressant. When it was still brand name, it was very heavy promoted on TV

for depression. It is indicated for fibromyalgia. It is indicated for anxiety. It is indicated for diabetic neuropathy. And I gave to her for neuropathic pain.

Q. In layman's terms, what's neuropathic pain?

A. Burning, tingling, sharp, electric shock-type type pain.

Q. Do depression and pain kind of go hand-in-hand sometimes?

A. If someone has chronic pain, oftentimes they will develop depressive symptoms. If someone has depression, it does by no -- does not mean whatsoever that they develop chronic pain.

But to answer your question a different way, in chronic pain patients that develop depressive symptoms, it can be helpful to give them medication that treats the pain and treats depressive symptoms at the same time, which I tell patients, for me, I don't prescribe typically antidepressants. I use duloxetine for the neuropathic pain. And if it treats any depressive symptoms, it's an added benefit for me.

Q. Okay.

A. But for her it was not for any depression.

It was for the pain.

Q. So did she complain of any symptoms with the side of her face?

A. I believe she did. Let me see. I believe that I recall that she complained about that and I believe she wrote it on her review of systems. That's where it was. Facial pain, yes.

Q. Okay.

A. Numbness, mouth and lips.

Q. Is that the intake?

A. Yes. Review of systems intake sheet.

Q. It looks like she was next seen by Dr. Kamaleson on November 18th, and that's page 97. This guy over here.

A. Correct.

Q. Notes indicate that she was doing better and that she had taken the Cymbalta.

A. Yeah.

Q. Let's talk about that. She said she took one Cymbalta and had a GI side effect and then discontinued the medication. However, her symptoms improved significantly with the single dose of Cymbalta. Actually, we'll talk about that more in a moment because I think she discusses that with you as well --

A. Correct.

Q. -- about a week later. Okay. And it looks like he does a physical examination of the right upper extremity and the left upper extremity. And you'll agree with me that both right and left were the same?

A. Per his note; correct.

Q. Per his note, yeah. And that using the Budapest criteria, the notes here would not support a diagnosis of CRPS?

A. His note from 11/18; correct.

Q. So that you'll, I guess, agree with me that by that point in time, we had five visits to Optim, five between yourself and Dr. Kamaleson, and that only one of the five could have supported a possible CRPS diagnosis. And that was when you examined her and what we talked about a few moments ago?

A. Yes, correct. From October, yes.

Q. Okay. Then she comes and sees you on the 23rd. Do you have that record?

A. Yes.

Q. Okay. And she talks about her experience with Cymbalta.

A. Yeah.

Q. Had you ever heard of that happening with any other of your patients where they take it one time and what it looks like is that the pain was almost completely gone, and this has lasted until now, which is almost a month, just shy of a month after she took it.

Have you ever heard of that kind of relief from one dose of Cymbalta?

A. No.

Q. What do you attribute that to?

A. I cannot explain that. She had a pretty dramatic side effect with it. I do know that when she came in, she was torn about trying probably another Cymbalta because she felt it was good benefit. She was torn about taking another one despite the side effects. But I cannot explain why she had the excellent benefit from using it one time in the evening. And it continued until I saw her again.

Q. And you've never seen anything like that since you've been practicing?

A. No. I do not recall that one tablet of Cymbalta caused that profound of an improvement the patients report.

Q. If she was making complaints of pain, I

think, if you go back through some of the PT stuff, and you can look at some of these notes where, you know, my take on it, correct me if I'm wrong, but she was complaining of very significant pain at each of the visits, you know, to yourself and with your, you know, visits to you or to Dr. Kamaleson?

A. Uh-huh.

Q. But at the same time she was unwilling to take another Cymbalta, which apparently resolved all of her pain almost completely because of some gastrointestinal issues?

A. Nausea, diarrhea, shakes, sweatiness. And the next day she felt horrible. And then the day afterwards, the pain was significantly better. I guess you -- from what she told me, she got benefit probably 20 minutes afterwards. Then felt horrible. And then the day after that benefit again.

Q. Okay.

A. So the question was it the Cymbalta that helped her or not. I cannot answer that.

Q. Is it possible to -- and I note that she didn't try the Cymbalta again. Would it have been an option to cut the Cymbalta dosage or have her take a half a pill --

A. No.

Q. -- and work it up --
A. No.
Q. -- over time?
A. No.
Q. Why is that?
A. Because the side effects, the way she described the side effects to me, precludes you from really recommending that again. I mean, it was not just I had some nausea. I mean, she had profound side effects. And, therefore, I did not recommend her to continue that.
Q. Now, you did a physical examination of her?
A. Yes.
Q. Now, it looks like there's no swelling that was noted?
A. Correct.
Q. If there had been any of these other criteria, skin changes, the hair, the fingernails, positive signs, would those have been included in your notes?
A. I can't answer that because I didn't write it down. I would assume if I see anything, I would have included it.
Q. That's your standard practice, I guess?

A. Yes.
Q. If you make a finding?
A. If you find anything abnormal, you would typically include it; correct.
Q. And none of those are included here?
A. Correct.
Q. Do you recall if she gave you any -- let me ask it a different way. Do you recall if you indicated the presence of any of the other signs on this day on November 23rd, 2015, and just didn't put them in your notes?
A. I don't recall.
Q. Okay. So as we sit here today and look at this record from November 23rd, the examination and the results of the examination contained in the notes and also including your personal recollection, does not support a CRPS diagnosis; is that correct?
MR. KRAEUTER: Object to the form.
A. Well, she was still under the working diagnosis of possible CRPS syndrome in my assessment.
Q. (By Mr. Meader) But none of the signs required for the diagnosis under the Budapest criteria were present; correct?
MR. KRAEUTER: Object to the form.
A. Well, I believe that with her report of

Cymbalta side effects, that took quite an amount of time to get through that and to discuss that. So I do not believe that a detailed all-inclusive exam was done. This was more a quick exam. And I think we discussed a lot about the Cymbalta with her.

Q. So did you examine her to see if there were any changes in her skin color, on her forearms?

A. I did the exam that I documented here. I cannot recall if I did any other exam.

Q. Okay. But as we sit here today and based on what's in these notes and based on what's in your personal recollection, you'll agree with me that the criteria necessary to satisfy a diagnosis of CRPS under the Budapest criteria are not satisfied?

MR. KRAEUTER: Object to the form.

A. They're satisfied from my 10/27 note already.

Q. (By Mr. Meader) From from your note and your memory; correct?

A. 10/27, yes.

Q. Yes. And, again, the note notes a possible CRPS-type syndrome status?

A. Yes.

MR. KRAEUTER: Object to the form.

Q. (By Mr. Meader) And so let's look at the

next one. It looks like she went back to Dr. Kamaleson on December the 30th.

A. Do you have a page number?

Q. Yes. 96.

A. Correct.

Q. And it looks like the notes report right upper extremity pain improved. She's doing better. Still having occasional pain. Her symptoms are overall improved significantly. And she's under your care and the care of her primary care physician. It looks like there's an examination done of her right upper extremity. No swelling, edema or ecchymosis. No tenderness. She's able to make a fist.

Using, you know, per notes, just what's on the notes here, you'll agree with me that the Budapest criteria are not satisfied supporting a diagnosis of CRPS Type 1?

A. Dr. Kamaleson's note of 12/30/15; correct.

Q. Let's go to January 19th. This is when she came back and saw you. And so it looks like you performed an examination of her?

A. Correct.

Q. And you'll agree with me that -- let me ask you this: Do you recall making any or observing any signs which would indicate or support a diagnosis

of CRPS which are not included in your notes here under physical examination?

A. I don't recall any, anything different than what I wrote down.

Q. As we sit here today, you'll agree with me that what's contained in these notes, it's insufficient to support a diagnosis of CRPS under the Budapest criteria?

A. I disagree.

Q. Okay. Explain to me why.

A. You said what's contained in these notes. In my notes?

Q. I'm sorry. Just from this date. I'm sorry. From this date. Based on what you observed on this day.

A. I didn't think the Budapest criteria have to be present always in every single note.

Q. How often do the Budapest criteria need to be present?

A. I believe, for example, that the swelling is present at some time. I think that's the -- actually the exact phrase that is used somewhere, appearance of swelling at some time in point, for example. So it doesn't mean that the swelling all the time.

Q. Well, swelling can be caused by things besides CRPS; correct?

A. Correct.

Q. Okay. Let's go back to my question and then we can come back kind of where you were going with your answer there. But you'll agree with me here that in your notes and also based on, you know, your recollection of this examination, January 19th, 2016, just based on what's on the notes, there's no report of or, you know, what's contained in there doesn't support a diagnosis of CRPS under the Budapest criteria?

MR. KRAEUTER: Objection to form.

A. The note from 1/19/2016 in isolation by itself from the exam doesn't support it; correct.

Q. (By Mr. Meader) Okay. And the symptoms that were -- let me ask it this way: There were insufficient signs present on January 19th, 2016, to support a diagnosis of CRPS; correct?

MR. KRAEUTER: Object to the form.

A. I don't think I can say that. I can say that I did not examine everything based on the criteria. I mean, I examined what's in there, but I didn't examine for the Budapest criteria by itself. So it's an insufficient exam to make a determination

by itself.

Q. (By Mr. Meader) So this exam and the exam from 11/23, you didn't examine her to determine whether or not she had all of the signs present to support a CRPS diagnosis?

MR. KRAEUTER: Object to the form.

A. I believe the first two visits were done to see how she responded to treatment. One visit was to discuss the side effects from the Cymbalta, which was a major point and a main point of that visit. And this visit was to discuss some other changes that she reported.

So I do not believe that I focused only on the CRPS on that visit. I focused more that she also had some eye problems and right-sided facial problems. And this visit was more centered around that.

Q. Okay.

A. Correct.

Q. So you did not examine her to determine whether or not the signs of CRPS were present at the November 23rd and the January 19th visits; correct?

MR. KRAEUTER: Object to the form.

A. I did not examine her specifically only for that; correct.

28:28 Q. (By Mr. Meader) You did not examine her at
28:30 all for that; correct?
28:31 MR. KRAEUTER: Object to the form.
28:32 A. I examined her.
28:39 Q. (By Mr. Meader) But you didn't either look
28:41 for the signs or you looked for them and did not note
28:44 them; right?
28:46 MR. KRAEUTER: Object to the form.
28:47 A. Well, other things were talked about in
28:53 those two exams, in those two encounters.
28:58 Q. (By Mr. Meader) I understand that.
28:59 A. That is correct, yes.
29:00 Q. Okay. So then you'll agree with me that
29:18 by this point, we had one, two, three, four, five,
29:26 six, this was the seventh visit to Optim and only
29:31 one, one out of the seven visits were the signs and
29:38 symptoms necessary to support a diagnosis of CRPS
29:45 observed?
29:46 MR. KRAEUTER: Object to the form.
29:48 A. I will talk to my notes. One of the three
29:51 visits is documented the signs and symptoms necessary
29:55 to diagnose CRPS.
30:02 Q. (By Mr. Meader) In your notes. Fair
30:03 enough. Right. Okay. I've got 3/22. Now, this is
30:29 after you met with plaintiff's counsel; correct?

A. I believe that's correct. I believe the meeting was mid or early March, I believe.

Q. And do you remember what was discussed at that meeting?

A. Which meeting?

Q. With plaintiff's counsel.

A. I believe that was the meeting when, I think it was at the Derenne office and I believe that it was discussed, of course, with the lawyers involved that there's a legal case going on. Yes.

Q. Was this the meeting where you were brought the additional articles about CRPS?

A. Let me think. It might have been. I'm not sure. I don't know if I got them the first visit. I don't recall.

Q. Okay. It sounds like the meeting lasted for an hour?

A. The first meeting with counsel?

Q. Yes.

A. I thought it was 30 minutes. Was it an hour?

MR. KRAEUTER: I can't answer.

MR. MEADER: He can't answer.

A. I cannot answer that.

Q. (By Mr. Meader) Maybe we can look at the

billing.

A. No, it's not in there.

Q. If it was $1500, would it have been 1500 for 30 minutes or an hour?

A. Anything between 30 minutes and an hour.

Q. Is $1500?

A. I think. I believe the billing, I believe the billing is 30 minutes at $750 and one hour is $1500 up to one hour.

Q. I got it. Okay. So do you remember the substance of that conversation at all?

A. Of the meeting?

Q. Yes.

A. There was a legal case going on. I think that Mr. Kraeuter was doing some fact-finding. That's what I recall.

Q. And this may have been when you were provided with additional articles about it? You think it was this meeting? How many meetings were there? Was there just that one?

A. I believe there was two meetings, yeah. Two meetings. Two.

Q. When was the last one?

A. Give me a second. Can I look at my cell phone?

Q. Sure.

A. I might have written it down. I know it was on a Wednesday morning, the first meeting. The first meeting was on March 2nd, 10 a.m., I believe. We know that. Let's see about another one. March 2nd. And then the second meeting might have been on March 16. So it might be there was two meetings before that.

And I believe -- let me see if there are other meetings. I believe those were the two meetings face-to-face. Yes. And I do not recall the first meeting was half an hour or one hour. I don't know.

Q. Okay. Do you remember what the need was for the second meeting or why?

A. I believe the second meeting, he asked me to produce a report, a summary that you have in front of you. I think that was the second meeting.

Q. To talk about the expert report?

A. Yes. Correct.

Q. And then is that something that you drafted?

A. Yes.

Q. Or who drafted that?

A. I did. I went through my notes and

produced that.

Q. That's the roughly --

A. So I would believe I got the articles probably in the first meeting.

Q. That would make sense. All right. Let's go back through your notes from the March 22nd --

A. Yeah.

Q. -- visit. It looks like you performed a physical examination?

A. Yes.

Q. It looks like there was no clear full-blown allodynia noted. No clear hair pattern changes or skin changes or swelling or edema.

A. Correct.

Q. Now, you'll agree with me that based on the signs or absence thereof, this examination does not support a diagnosis of CRPS under the Budapest criteria?

MR. KRAEUTER: Object to the form.

A. Correct. This would not by itself fulfill the sign for CRPS.

Q. (By Mr. Meader) And would not support a CRPS diagnosis; correct?

MR. KRAEUTER: Object to the form.

A. By itself; correct.

38:13 Q. (By Mr. Meader) And as per your practice, had you noted any signs relevant to the Budapest criteria, it would have been noted in the notes?

MR. KRAEUTER: Object to the form.

A. Correct.

MR. MEADER: All right. Could we take a very short break just so I can look at the May record and the June record. Maybe I have a couple questions about those.

MR. KRAEUTER: Sure.

(Recess from 6:55 p.m. to 7:00 p.m.)

Q. (By Mr. Meader) All right. Let's look at the notes from the May 23rd visit.

A. Uh-huh.

Q. It looks like you performed a physical examination. There is some paresthesias?

A. Paresthesias, yes.

Q. Paresthesias in the right upper extremity. What is paresthesias?

A. Paresthesias is basically in layman's terms a different sensation than you would expect.

Q. Okay.

A. So if you put something sharp on there, you would say this is sharp. Paresthesias means it's more vague. It's a different sensation.

45:56 Q. Would that --
45:57 A. Go ahead.
45:58 Q. I'm sorry. Go ahead.
45:59 A. It isn't in the same group as hyperesthesia, hyperalgesia, different allodynia. It's one step different, but same overall type of finding.
46:14 Q. That was my question actually. Would that fall into the sensory category?
46:18 A. Yes.
46:19 Q. Okay. No clear allodynia was noted. No hair pattern changes noted. Mild swelling noted. So using the Budapest criteria, would this physical examination support a finding of CRPS?
46:43 A. Yes.
46:59 Q. What signs are present?
47:02 A. Hyperalgesia, hypersensitivity and paresthesias. That would be that.
47:08 Q. Which is the sensory category?
47:10 A. Correct. And then mild swelling noted in the right and left hand would be the two signs that are present for the category of the signs for the Budapest criteria.
47:29 Q. Is there any relationship between the degree of swelling and the level of pain reported by

a patient?

A. No.

Q. It looks like you changed her from the Percocet to the Nucynta?

A. Correct.

Q. What was the reason for that?

A. One of the reasons was that Nucynta has what's called an abuse deterrent formulation. So you cannot -- well, it's harder to abuse it --

Q. Okay.

A. -- for illicit uses.

Q. Okay.

A. Not impossible but harder.

Q. Did you have those concerns --

A. No.

Q. -- with her?

A. It's not about concerns specifically. It is more about if you have a patient that you might expect that they would need medications for longer term, you want to make sure that No. 1, those medications don't lay in the wrong hands, that they're abuse-deterred possible, that they're -- it's not easy to abuse. It's not specific to a patient. It's specific to society.

Q. Sure.

49:14 A. So it's more general society background
49:20 than a, in her case, a specific patient concern.
49:27 It's, like I say, you wear a seatbelt. Are you
49:30 afraid you're a bad driver? No. It's the law to
49:32 wear a seatbelt. It's the right thing to do. That's
49:34 the same thing here. It doesn't mean you're a bad
49:38 driver because you're wearing a seatbelt.
49:38 Q. Preventing this kind of thing?
49:42 A. Yeah, not even preventive. Just if it's
49:46 available -- you have an air bag in your car, that
49:51 doesn't mean you expect to be in an accident.
49:51 Q. Right.
49:53 A. This is the exact same thing.
49:54 Q. Okay. Let's look at the records from June
49:56 the 14th. It looks like you did a physical
50:01 examination.
50:01 A. Yes.
50:02 Q. It looks like there was allodynia noted.
50:10 No hair pattern changes. No swelling.
50:24 A. Yes.
50:24 Q. And would this physical examination
50:32 support a diagnosis of CRPS?
50:38 A. Talking only about the signs, she has
50:42 allodynia, which is a positive sign for that. Well,
50:49 the guarding of the right upper extremity, you would

say reports of decreased range of motion and/or motor dysfunction. So, yes, for the signs. Just for the signs, yes.

Q. And take me through that. You say it's because she is --

A. Well, she has the allodynia and hyperalgesia, hypersensitivity, which is one sign. And then the patient's guarding the right upper extremity, which is a kind of a protective mechanism. She did not let me even go through a full range of motion due to pain. So that means it's a motor dysfunction.

Q. And so this would have been the first time that she did not let you go through a full examination due to pain, due to the limitation on her mobility?

A. If I recall correctly, the very first visit, it was similar that she had severe pain with range of motion, which then improved some and then got worse again.

Q. Okay. Now let's look at the note from the Mayo Clinic.

A. Okay.

Q. And on page 1 there's a bottom paragraph, second sentence, and I am just pointing these things

53:14 out to kind of save time. You're welcome to read the
53:18 whole thing if you'd like. It says the skin of her
53:21 right forearm used to turn red and blotchy, sometimes
53:25 swell and become warm. But this has since resolved.
53:28 A. Okay.
53:29 Q. And then we've got on page 3 under
53:33 physical exam, extremities, no obvious color change,
53:37 swelling or temperature difference in the right upper
53:40 limb compared to the left.
53:42 A. Wait, wait, wait. You're on page?
53:45 Q. Page -- I'm sorry. I was counting the
53:48 cover letter. It's page 2.
53:49 A. Okay. All right. Go ahead.
53:51 Q. No obvious color change, swelling or
53:53 temperature difference in the right upper limb
53:55 compared to the left.
53:56 A. Uh-huh.
53:57 Q. So would, based on your review of these,
54:24 the notes from this examination, would it support a
54:26 finding of CRPS under the Budapest criteria?
54:30 A. Let's talk about the symptoms -- I'm
54:55 sorry, about the signs on the exam. Light touch felt
54:59 like a burning feather on the right upper limb, which
55:04 is --
55:04 Q. Would be sensory?

55:06 A. Sensory. Movement of the right upper limb
55:09 was slow and guarded due to pain. If you count it
55:13 under the motor function, I mean, you could give one
55:17 point for that as well. Let me look. So for the
55:27 signs, you would have the two out of four signs
55:30 positive in the physical exam from the Mayo Clinic.
55:44 Q. Did they diagnose her with CRPS?
55:46 A. They diagnosed her with chronic pain
55:57 involving the right upper limb after an injury April
55:59 2015.
56:00 Q. Is that something different than CRPS?
56:05 A. CRPS is a chronic pain syndrome.
56:08 Q. Uh-huh.
56:09 A. This was at the Mayo Clinic from my
56:19 information. I sent her there for the facial
56:21 abnormalities and the other things that I wasn't
56:26 familiar with to treat. And she was referred to the
56:34 pain management at the Mayo Clinic and a consultation
56:40 with a pain psychologist was requested as well.
56:45 Q. Do you know if that's taken place?
56:46 A. From my information it has not.
56:49 Q. All right.
56:50 A. Yet. And they also did some lab studies
56:58 which were negative for inflammatory markers. That
57:06 was a question you asked before.

57:07 Q. Which one?

57:08 A. You asked if I did a blood count. It was done and it stated there was no inflammatory markers.

57:16 Q. All right. So your interpretation of this is that she was diagnosed with CRPS or not diagnosed with CRPS? I understand they are referencing chronic pain here, but I don't see CRPS referenced anywhere.

57:43 A. She was diagnosed with chronic pain syndrome. They did not use it as a positive or negative. They did not say she does have it or she does not have it. That's correct. They did not even comment on it, which, in my opinion, when I read it, was not surprising since I sent her over for the facial abnormalities.

58:09 Q. I'm looking at the first sentence here. It says Ms. Orr is a 45-year-old woman referred for evaluation of RSD/CRPS.

58:17 A. I know that's what it says. The interesting part is in my note when I sent over to the Mayo Clinic from March 9, 2016, I wrote since I can't -- patient reports that she was diagnosed with trigeminal neuralgia. Since I cannot fully explain her symptoms -- it was about the face -- from a CRPS type syndrome, I would like to have her evaluated by a neurologist at Mayo Clinic for the neurologic

symptoms as noted above to determine if there's any etiology. In my experience, her memory difficulties, difficulty even getting speech started and sometimes even inability to say her name is not related to CRPS.

So I referred her to Mayo Clinic to evaluate for that. Now, they took it apparently that she was referred also for the CRPS.

Q. We'd have to talk to them, I guess, to figure out --

A. Correct.

Q. Yeah. Okay.

A. And it might be that on my referrals, my staff put on CRPS which is what our diagnosis was in our clinic. It might well be. Per my note if they needed to see her, I referred her for the neurologic symptoms that I couldn't explain.

Q. Did you ever do an alcoholic bath test with her?

A. A what?

Q. Alcohol bath test?

A. You could enlighten me what that is.

Q. This is my understanding of the way it's used. Is when a patient reports hot or cold skin in connection with CRPS, you can apply alcohol to it and

it will induce a reaction and it will, if the patient, you know, does suffer from CRPS and that symptom or that sign has been present previously, the use of the alcohol bath or taking a little dropper and dropping alcohol on the affected area will induce that sign.

A. Do you have any literature for that?

Q. Yes. I think it's actually in what you provided me or what was provided in your expert report.

A. I don't think I provided you that.

Q. Yeah. I think it was in -- it may have been with --

MR. KRAEUTER: Where is it?

A. I mean, if this is a test, I've never seen it done. I've never heard about anyone doing this.

Q. (By Mr. Meader) Okay. I just thought I'd ask.

A. This is new for me.

MR. KRAEUTER: Garrett, where in the documents?

MR. MEADER: I think it's in there somewhere.

A. And it might well be in some empirical that some people do things a certain way. I have not

heard this to be a standard test that it's accepted anywhere.

Q. (By Mr. Meader) Okay.

A. Because, honestly, I do not know about that.

Q. Okay. I don't know where it is. Honestly, I don't know if it's that important. Let me go back and find it.

A. To answer your question, I have not done that.

Q. That's my question was if you heard of it.

A. I have not heard of -- I cannot recall that I've heard of that specific test, no.

MR. KRAEUTER: Okay. Where is it in the literature?

MR. MEADER: I can't put my fingers on it. He's answered my question.

Q. (By Mr. Meader) So is early treatment important in CRPS, in managing CRPS?

A. It's common practice to start treatment as early as possible, yes.

Q. And what are the accepted treatments?

A. Medications, physical therapy and occupational therapy, hypersensitization therapy. Those are the typical early treatments.

03:53 Q. And would you agree that effective
04:02 treatment should be functionally focused and center
04:07 around physical and occupational therapy?
04:10 A. That's the common answer is it is
04:18 difficult to assess how effective treatment is in the
04:24 literature, but the consensus is that physical
04:29 therapy and occupational therapy is a mainstay of
04:31 treatment.
04:32 Q. Okay.
04:32 A. The outcomes, the truly evidence-based
04:39 medicine studies are not there to support it fully or
04:42 to discredit it.
04:44 Q. But it is the consensus it sounds like?
04:47 A. It's what typically is done, yes.
04:50 Correct.
04:50 Q. All right. And you'll agree with me here
04:54 that the physical therapy that Ms. Orr went to, it
04:59 improved her range of motion?
05:00 A. I do not know if it improved her range of
05:03 motion. I can't say.
05:04 Q. Okay.
05:06 A. But I know she had probably 11 or 12
05:08 sessions, at least, I believe it was occupational
05:11 therapy.
05:11 Q. Right. And would you agree with me that

Kamaleson's records showed a trend of improvement in range of motion?

A. Per his notes, yes.

Q. Per his notes, yes. Which coincided with the time at least partially that she was going through physical therapy?

A. Occupational therapy.

Q. I'm sorry.

A. Correct.

Q. Occupational therapy. Okay. And is she still doing that? Is she doing any occupational therapy or physical therapy?

A. I do not believe she's currently enrolled.

Q. When is the last time that she did occupational or physical therapy?

A. Probably late 2015, but I can't say for sure.

Q. Okay. Why is she not doing it now?

A. Because overall she did not feel there was any significant improvement with it.

Q. Even though her range of motion, it appears, improved?

A. I can't say if it improved with it or not. I can say that her pain is still significant and it didn't seem that the occupational therapy was able to

06:28 resolve her pain in a functional role.
06:34 Q. Because it sounds like it's sort of an
06:38 accepted, I guess, treatment for it and that it's
06:42 encouraged. I guess I'm trying to figure out why it
06:45 is she's not doing it any longer when it appears
06:48 to --
06:48 A. I believe she had 12 visits and that's a
06:52 pretty good number for a first treatment.
06:57 Q. Okay. And then so beyond that, you've got
07:07 drugs and you've got medications and you've got
07:11 occupational or physical therapy. Then what are some
07:16 other options for treatment?
07:17 A. A psychology/cognitive behavioral therapy.
07:26 Q. Which appears to have been recommended
07:28 here but not done?
07:29 A. That's correct.
07:31 Q. By the Mayo Clinic? Recommended by the
07:33 Mayo Clinic?
07:34 A. Recommended by me.
07:34 Q. And you as well?
07:35 A. Yes.
07:36 Q. Okay. When was that recommended by you?
07:38 A. Well, this is the CBT, cognitive
07:52 behavioral therapy is recommended for longer term
07:54 benefit. It's more coping mechanisms, how to deal

07:58 with the pain, how to deal with the effects of the
08:01 chronic pain. And I believe the Mayo Clinic
08:10 recommended pain psychology, which might play a part
08:13 in that as well. I don't believe I sent her off for
08:21 cognitive behavior therapy yet.
08:23 Q. Any other counseling that you've
08:24 recommended for her?
08:25 A. I don't know if I recommended any
08:32 counseling at the current time. I believe right now
08:37 we're still in the process with the spinal cord
08:40 stimulation to see how much benefit she can get and
08:44 then determine what else she needs.
08:46 Q. How many spinal cord stimulators have you
08:48 put in?
08:49 A. Since 2004, so that's 10, 12, 11-12 years,
09:01 12 years, multiple.
09:04 Q. Ballpark? Dozens or hundreds or --
09:08 A. Probably hundreds.
09:09 Q. Hundreds?
09:09 A. I would think, yeah.
09:11 Q. How many have you put in to treat CRPS of
09:16 the total that you put in?
09:17 A. Put in 10, 12.
09:23 Q. So that's been one a year?
09:25 A. Maybe around one a year possibly. Maybe a

09:50 1 little bit more probably.
09:52 2 Q. Have you kept track of how many of those
09:59 3 spinal cord stimulators that you put in for CRPS
10:01 4 patients you've gone back and taken out?
10:03 5 A. I do not -- let me think. I don't believe
10:11 6 that I've taken out one.
10:13 7 Q. For CRPS?
10:14 8 A. I don't think so. Not to my recollection.
10:19 9 No.
10:20 10 Q. Now, is the spinal cord stimulator sort of
10:30 11 the final option for treatment?
10:31 12 A. No. It's not the final option. There's
10:35 13 actually a push to do those earlier in the past. It
10:38 14 used to be, again, in the past that you'd follow an
10:44 15 algorithm with medications, physical therapy,
10:48 16 occupational therapy.
10:51 17 Q. Blocks?
10:52 18 A. Blocks possibly. Then the next step
10:56 19 possibly would be spinal cord stimulators.
10:58 20 Q. Right.
10:59 21 A. And now it's proposed to be hopefully done
11:03 22 earlier than later. Not waiting as a last resort but
11:08 23 waiting as a part of the treatment algorithm to be
11:14 24 done earlier. So it's not the last resort. It's not
11:22 25 spinal cord stimulator if everything else does not

work.

Oftentimes I'll use spinal cord stimulators to see if you can get a patient decrease in her medication, improve the pain, and ideally would like to improve their functional level, improve the quality of life with it. And sometimes pain medications, especially opiates, cause side effects. And if you can decrease the amount of pain medication with a spinal cord stimulator, it's worthwhile to do it as well.

Q. What is the likelihood that the medications will be decreased once the stimulator's implanted? What's been your experience with that?

A. Well, it's typical to estimate because the way the spinal cord stimulation works is that the first step would be a trial to determine if the patient gets benefit or not. During the trial, you would look at the pain medication, if they're able to take less pain medication, if they get benefit. And then you determine if the patient's a candidate for a permanent implant of a spinal cord stimulator. The goal is to decrease the pain medications with it.

Some patients, to be fair, have an increased functional level, do more with the spinal cord stimulator and then cause more pain doing things

they would not be able to do otherwise, but they hadn't been able to do in a long time. And, therefore, they might still need oral pain medications as well.

Q. What kind of things would you think that Ms. Orr would be unable to do now as a result of --

A. Currently?

Q. Uh-huh.

A. She's guarding her right upper extremity. She told me in the last visit that she's typing with the left hand on the computer. She can't use the right hand anymore. I think she has enough promise with the activities of daily living with the right upper extremity. She has difficult time using the right arm. Right now I don't think she'll be able to brush her hair with the right arm. I think she's doing it with the left hand.

I know that at her job, they reassign her. She does some different duties now because of that to substitute the right upper extremity loss of function with the left side.

Q. Do you remember specifically what the change in duties was?

A. Yes. I know that she -- I'm not a hundred percent sure what her job description is, but I do

know that her supervisor allowed her to do things differently and that she's not going to a certain unit where she works because she couldn't defend herself. I think she works in something medical. I don't think she's in a medical field, but in some medical facility. And I believe that a lot of -- maybe a psychiatric unit or psychiatric patients. And I believe that they feel it would be too dangerous for her since she couldn't defend herself on the unit.

But that's as far as I know. I don't know exactly her job duty there. I don't think it's patient contact that she has. She's not a nurse. She's not doing hands-on patient contact. But she did tell me that her supervisors switched her over to not include that in her job.

Q. What are the things, I guess, would you be or would you expect her to be unable to do? You mentioned brushing her hair, you know, with her right hand. You would expect that she wouldn't do that?

A. Brushing her teeth with her right hand. I think she has a difficult time probably getting dressed with the right side. Cooking with the right arm, cleaning.

Q. Anything that would involve lifting?

15:15 A. Yes.

15:16 Q. Now, what was the limit on her range of
15:22 motion? Was it, you know, she couldn't pick it up
15:27 here or out to the side or . . .

15:31 A. On the last visit, she got the right upper
15:34 extremity and any attempt to pick it up over 90
15:37 degrees abduction caused a lot of pain. Even before
15:44 then it caused pain. So I would think that any
15:50 overhead activity would be extremely difficult for
15:52 her.

15:53 Q. What about something that is not overhead?
15:57 I mean, just kind of in front of her?

15:59 A. Looking at my last note, only the last
16:04 note, she was very guarded. She developed the
16:06 allodynia. So I think at the current time from the
16:10 last visit, which was sometime in June, it would
16:16 definitely be very difficult for her to use anything,
16:18 to do anything with the right upper extremity.

16:20 Q. It sounds she can't even type any longer?

16:23 A. She types with her left.

16:24 Q. With her left hand, yeah.

16:25 A. Correct.

16:26 Q. Would there be any benefit of trying the
16:39 generic version of Cymbalta, see if it doesn't have
16:42 the digestive issues?

A. I would assume she received a generic version.

Q. If she didn't, would it be worthwhile to try that again?

A. No. It's bioequivalent. So I, I did not prescribe her brand name Cymbalta. I prescribed Cymbalta because that's a known medication. Typically at the pharmacy, she would get the duloxetine. It's just common practice that you would get the generic if it's on the market unless I would write distribute as written. Then I would specifically request the brand name only, which I did not.

Q. So the difference between the generic and the brand name is the fillers, I understand, lots of times, and not necessarily the active compounds or --

A. Well, the difference between generic and brand name might be there's no difference. It might be the same company producing it possibly. And the active ingredient has to have certain standard compared to the brand name. There might be a different system, different matrix that provides the medication. That is correct.

Q. Okay.

A. But I do not know.

Q. Have you ever seen it where a patient has taken the name brand one and had an adverse reaction and taken an off brand and not had an adverse reaction or vice versa, in that adverse reaction was caused by, you know, some filler that was in the medication as opposed to the active ingredient?

A. I have seen more that some patient in the past have reported that a certain formulation was less effective than a different one with the same medication. And it not even always between brand name and generic, but even between two different generic brands that a patient said I got better benefit always with this generic brand versus this generic formulation.

I do not recall if I've ever seen a patient that had a brand name and was not tolerating it and got the generic and was tolerating it. I do not believe that I can recall that.

Q. So the spinal cord stimulator, that could potentially resolve a need for medication or lessen the --

A. The hope is that it would definitely lessen the need for medication. That's one of the criteria that I would look at during the trial. Yes.

Q. How long does the trial last?

A. Well, my trials last anywhere from five to seven days.

Q. Is there any literature out there that says this percentage of time when the spinal cord stimulator is successful, that medication usage goes down?

A. I don't know if there's any clear literature out there. I do not know.

Q. What is trigeminal -- I apologize if I mispronounce that -- neuralgia?

A. Trigeminal neuralgia?

Q. Yes.

A. That's a medical term. It's an inflammation and painful condition with one of the facial nerves, the fifth nerve, the fifth cranial nerve. It's typically a pain on one side of the face in a certain distribution.

Q. Okay. And that's limited to the face?

A. Yes.

Q. All right.

MR. MEADER: Take about a five-minute break. I'm nearing the end. I just want to look at my notes real quick.

MR. KRAEUTER: Sure.

(Recess from 7:37 p.m. to 7:41 p.m.)

Q. (By Mr. Meader) So the pain that is out of proportion to the stimulus that you were talking about, you know, you just like touch her on the arm and then, you know, the sensation or the pain was greater than would be expected?

A. Are you talking about the definition of CRPS?

Q. Right. And what you've observed, I guess --

A. Oh, oh. Okay.

Q. -- with Ms. Orr here. That's something you've observed; right?

A. Yes.

Q. Now, when you were doing your examination of her and you touched her arm, how much pressure would you put on it? Would you just lightly touch it or squeeze it? What's your standard? Do you recall?

A. The standard is to put as much pressure as the patient allows you to --

Q. Okay.

A. -- which in patients with CRPS is to be limited. For allodynia, you just do a stroke very soft on the skin because allodynia means pain to a non-painful stimulus.

Q. Sure.

A. For hyperalgesia, you know, pain out of proportion, you just press down. They should feel it and then you just see what kind of pain response they give you.

Q. Okay. So with the allodynia, it sounds like just a light brush. Could it be something like me wearing long-sleeved clothes?

A. Yes.

Q. Something that bad or that light?

A. Yes. Patients, as an example, that have CRPS in the lower extremity, one of the findings that they report oftentimes when you ask them is at night, they do not like to have a blanket or a bed sheet touching their foot. They hang their foot out of the bed just because it's so uncomfortable.

Q. All right.

A. Yes.

Q. So you would expect her then to avoid doing activities or getting things that would, you know, apply pressure or any type of touch to the affected area, assuming it's allodynia?

A. If it's allodynia; correct. Oh, yes. Allodynia, you would expect that a patient that's -- anything that they can do to guard that extremity or that area, trying to avoid any pressure on it, any

27:25 touch on it, any trauma to it, yes, that's correct.
27:30 Q. I think in your notes you referenced some
27:34 allodynia. And was that something that your
27:38 understanding for her is that at least -- I think
27:41 it's referenced more recently --
27:42 A. Yes.
27:43 Q. -- that is constant, that is the allodynia
27:47 constant?
27:47 A. Okay. The difference between allodynia
27:58 and hyperalgesia is fluid, okay, in one way. So you
28:05 expect pain to palpation to be there most of the time
28:11 at least. Yes. Allodynia, I've had some patients
28:15 that have it all the time, very same area and you
28:20 have some other patients that it waxes and wanes in a
28:24 way. Fluctuates somewhat.
28:27 Q. How about with Ms. Orr? Does it wax and
28:30 wane?
28:30 A. I don't know if it waxes and wanes. I
28:38 only diagnosed her with allodynia one time. That was
28:41 the last visit. She had pain before to palpation.
28:47 The last time she maybe almost did not want me to, I
28:51 remember, didn't want me to even examine the forearm
28:54 because she knew it was going to cause pain. She was
28:57 very clearly emotionally like please don't touch me
29:00 there.

So last time, then, of course, I did just touch her there and she had significant pain with it. That's the definition of the allodynia, yes.

Q. Now, do you know whether or not that stage with her, did she express to you one way or another whether or not --

A. I think she -- I think in my note for the last time, I did report that she said it was for three or four weeks that it got worse. But if you want, I can look that up.

Yes. She reports pain with touch in the right hand and wrist area and some in the forearm. Let me see. I believe that she told me it's gotten worse over a couple weeks.

I do not see that in my note anywhere might be -- yeah. I don't know how long the allodynia had been going on.

Q. Okay. Have you ever heard of mural therapy?

A. Yes.

Q. Can that be an effective way to treat CRPS?

A. Some people propose it as part of PTOT.

Q. Uh-huh.

A. There are some case reports that some

patients have benefitted with it and others have not. Yes. I've heard about it, yes.

Q. Was she recommended to do that?

A. Not by me. Not specifically mural therapy.

Q. Would that have been something you recommended or something that the therapist just sort of --

A. The therapist.

Q. That would have been something the therapist would have come up with?

A. Yeah.

Q. Okay.

A. If I felt strongly that is an actual treatment that can be recommended as part of therapy, but typically therapists would possibly incorporate that in their treatment plan.

Q. CRPS, is that a progressive condition?

A. It can be, yes.

Q. And do you believe it is in Ms. Orr's case?

A. For her with the notes that I have has been a fluctuating condition that the last time she was the worst that I've seen her. I cannot say if it's going to be progressive in the future or not.

But it is not uncommon for CRPS based in the literature that there's some studies that go several years and they show that some patients get better. Some stay the same. Some get worse.

Q. Now, if it is progressive in her case, would you expect to see more frequent signs such as swelling, allodynia, hyperalgesia?

A. Hyperalgesia.

Q. Hyperalgesia, the redness, the change in skin tone, the nails, the hair, would you expect to see an increase in all those?

A. You could see an increase in that. You could also see an increase just from disuse, that a patient doesn't use the arm or the upper extremity and then you could see possible findings of some muscle atrophy just because of disuse. Possibly down the road you can see some contractures if the patient doesn't do range of motion. You can see that down the road as well.

Q. Have you ruled out myofascial pain with radial flexis?

A. With the what?

Q. Radial flexis?

A. Radial flexis.

Q. Maybe I'm saying it wrong. Radiating?

A. Oh, radiating. Clinically there's likely some part of my -- myofascial pain by itself just means pain from muscle and soft tissue.

Q. Uh-huh.

A. So if you define it like that, you would say it would be expected. Now, if you want to call myofascial pain syndrome the way she presented localized in the area where she had it, it would be less likely. There's no, there's no test, objective test that you get a blood draw or an X-ray or an ultrasound to rule out myofascial pain.

Q. In your experience, how often do the patients show a sign of either the hot or cold changes in their skin when they've been diagnosed with CRPS?

A. In my experience, a lot of patients report it. And in my experience, patients even report it sometimes when you put your fingers on, you don't feel it. They still report it historically that they have it and they still report, Doctor, look at this. This feels cold and this feels hot. And I put my finger on it, I can't feel a difference. So a lot of patients report it. Clinically I don't find it as often. You do -- I do find it, but not all the time. Clearly not.

Q. Same question for hair and nails.

A. Especially with the hair, if you believe in these stages that we talked about. There's one stage where the hair grows more and there's one stage where the hair kind of grows less. It's a very subjective measurement. I do see some patients that have more hair loss and really shiny skin with, looks like the hair is just not there anymore.

The nail growth I do see once in a while. Not very frequent.

Q. Okay. Assuming a patient has been diagnosed with CRPS, how often would you expect that patient to exhibit the signs and symptoms necessary to support a diagnosis under the Budapest criteria when that patient is examined by a physician?

A. I cannot say. I don't know. I don't know if you can say you have to, every three visits you have to see all the signs and symptoms. Oftentimes in followup visits, you don't ask for all the symptoms again because you've established symptoms already. You look for other things. You look for how do you -- the patient react to medications. What kind of changes do we have to make? What kind of treatment can we make?

So I can't, I can't answer that. As a

physician you don't do a full history and physical every single time a patient comes. You do that typically more detailed in the first visit and then as the clinical course dictates. Some visits are really just to see if you start a patient on a new medication, you really focus on, okay, what is the result of the medication. Any side effects? Is there any benefit? Is there any, you know, reason to continue the medication, discontinue the medication, do a different medication?

So at that point you wouldn't look at all the historical signs and symptoms again necessarily.

Q. Okay.

A. So it's very difficult to say how often do you expect to fulfill all the criteria versus not.

Q. Okay. Do you think that it is not important to verify that a patient is still suffering from a condition for which they are being treated?

A. That was a double negative. Do you think that it is not important.

Q. Let me ask it this way.

A. Do you think it is important?

Q. Let me ask it this way: Isn't it important for you as a treating physician to verify that the patient you are treating is still suffering

from the condition that you're treating them for?

A. Correct. It's important.

Q. Okay.

A. Meaning that once we establish a diagnosis and the patient comes and tells you some symptoms still and pain, you go from there. You don't reestablish a diagnosis every single time.

Q. Okay. But if you were uncertain in your initial diagnosis, you'd certainly want to follow up --

A. Yes.

Q. -- and do a thorough and complete physical examination each time until your diagnosis was verified?

A. You treat the patient; correct. Yes.

MR. MEADER: Okay. That's all I've got.

MR. KRAEUTER: I've got a couple followups.

EXAMINATION

BY MR. KRAEUTER:

Q. Doctor, there are some questions about blood testing to try to establish CRPS. Are you aware of the Mayo Clinic doing some blood testing --

A. Yes.

Q. -- on Ms. Orr?

39:34 A. Yes.

39:35 Q. And did those blood test results further confirm your belief that she has CRPS Type 1?

39:44 A. Well, the blood testing is truly done to rule out any other explanation.

39:49 Q. Uh-huh.

39:50 A. The blood test itself doesn't establish CRPS.

39:52 Q. Okay.

39:53 A. At all. So in my clinical opinion when I saw her, I did not feel it with necessary to get any blood tests. The Mayo Clinic as part of their standard protocol or their treatment, they wanted a set of blood values.

40:10 And, again, for me it wouldn't have been necessary to do at the current time. Now that it's been done and we have the results, the blood test showed that there's not any inflammatory process going on when I looked at them. I looked at them today for the first time. Just glanced. And as far as I can tell, no autoimmune markers were positive. But, again, I did not see every little single value.

40:42 Q. Sure. So that would tend to rule out cellulitis, arthritis, Raynaud's syndrome?

40:46 A. Raynaud's syndrome is ruled out

clinically. You don't need a blood test specifically for that. Cellulitis, you would typically expect increased inflammatory markers. So the blood test shows there's no inflammatory process going on.

Q. Okay.

A. And it's a very unspecific blood test, not for one specific diagnosis, but overall for any inflammatory process.

Q. And in this case, you ruled out Raynaud's syndrome clinically?

A. Yes.

Q. Okay. And how do you do that?

A. Typically Raynaud's syndrome you would know by history and physical exam. And for Raynaud's, the history is very important. They typically would tell you that based on the temperature, they would have changes in their skin coloring, changes in pain, and she did not report any of that.

Q. Okay. And you ruled out cellulitis in this case?

A. I did not see any evidence of cellulitis; correct.

Q. Okay. And if she came to see you the first time in October of 2015 after an injury in

April of 2015, you wouldn't expect cellulitis to exist that long?

A. There's some patients that have cellulitis come on for a long time. But the clinical picture was not consistent with cellulitis.

Q. For Ms. Orr?

A. Correct.

Q. Okay. Arthritis, you already talked about how the fact you don't get arthritis in the middle of your forearm.

A. Correct. And there was no indication for arthritis.

Q. So you're able to rule that out clinically?

A. Correct.

Q. Okay.

A. But she did have some X-rays done before that didn't show any abnormalities.

Q. Okay. And that would also rule out arthritis?

A. Yes.

Q. Okay. The duplex scanning, that would test for DVTs?

A. Yes.

Q. And that's, what is that, deep vein

42:49 thrombosis?

A. Yes; correct.

Q. Or peripheral arterial obstruction?

A. Possibly if you look at that specifically, yes. The typical doppler ultrasound, in order for evaluation for blood clot, that's what it looks for if there's a blood clot. So you want to rule out a blood clot with that.

Q. And you were able to rule out deep vein thrombosis clinically?

A. Clinically I did not feel that there is any criteria that I would associate with blood clots.

Q. Okay. Same thing for peripheral arterial obstruction? Did you rule that out clinically?

A. Correct.

Q. In this case?

A. Correct.

Q. You did, in fact, rule it out clinically in this case?

A. Correct.

Q. Okay. I want to go to page, and it looks like marked 125 of your expert report for these attached articles.

A. Okay.

Q. So I want to draw your attention to this

part right here where it says, "Additional objective testing (thermography, triple phase bone scan, quantitative pseudomotor axon reflex test or a trial sympathetic ganglion block) is not necessary to make the diagnosis." Do you agree with that statement?

A. A hundred percent correct, yes.

Q. Okay. And in this particular case, or as I think you testified earlier, the triple phase bone scan is no longer part of the diagnostic criteria at this time?

A. It's not part of the Budapest diagnostic criteria; correct.

Q. And the trial sympathetic ganglion block also not part of the diagnostic criteria at this time?

A. Correct.

Q. Okay. The quantitative pseudomotor axon reflex test -- let me go to the other section of the literature. Let's go to page 112, in the first column. I'll show you where it is when you get there. This is the section I'm looking at. Down at the bottom paragraph it says these tests are rarely used in practice. Do you agree with that statement?

A. Correct. They're very rarely used in clinical practice. Correct.

45:39 Q. And, Doctor, when you diagnose a patient
45:53 with CRPS Type 1, do you just look at one exam in
45:59 isolation or do you look at the total course of
46:01 treatment to assist in the diagnosis?
46:04 A. I try to do the total course of treatment
46:12 to come to a conclusion.
46:15 Q. Okay. And then on page 7 of your report,
46:32 you were asked some questions about myofascial
46:36 pain --
46:37 A. Uh-huh.
46:37 Q. -- by defense counsel. And that defines
46:42 myofascial pain syndrome; is that correct?
46:45 A. Correct.
46:45 Q. Okay. And you assessed that or considered
46:53 that in your differential diagnosis of Ms. Orr; is
46:56 that correct?
46:56 A. Yes.
46:56 Q. And were you able to rule that out
46:59 clinically?
46:59 A. Yes. Her overall signs and symptoms were
47:05 not consistent with myofascial pain syndrome;
47:09 correct.
47:09 MR. KRAEUTER: Okay. All right. I think
47:11 that's all I have.
47:11 EXAMINATION

47:12 BY MR. MEADER:

47:12 Q. Have you ever been disclosed as an expert witness?

47:15 A. Tell me the definition of expert witness.

47:23 Q. Kind of like what we're here doing today where you've been retained by either a plaintiff or defendant to offer testimony?

47:28 A. No. No.

47:30 Q. First time?

47:31 A. Yes.

47:31 Q. Okay.

47:32 A. I've had one case, but I assume it was more just a lawyer asking me questions with no stenographer there. And it was just a catalog of questions I answered. So I don't know if you say that's an expert witness. I think it's not. It was a patient I was treating. It was a half hour meeting one time.

47:40 47:42 47:46 47:49 47:52 47:55

47:55 Q. Okay. Good deal. One last question. On this page 125, I just want to make sure I get everything in here. It says additional --

47:58 48:04

48:08 A. Okay.

48:08 Q. -- additional objective testing and it goes to is not necessary to make the diagnosis but it goes on to say, and this wasn't read, but in some

48:11 48:15

cases may be used to support a clinical diagnosis? Do you agree with that?

A. Well, not if you go by the formal criteria.

Q. By the Budapest criteria?

A. Correct.

Q. I think what it's saying, and I'm just trying to summarize here, but the more information you have, the better to make a diagnosis? Would you agree with that proposition?

MR. KRAEUTER: Object to the form.

A. In general, the answer is yes.

Q. (By Mr. Meader) All right.

A. If you have more information, you can make an informed decision.

Q. All right.

A. Yes.

MR. MEADER: Let's get out of here.

MR. KRAEUTER: One last followup.

EXAMINATION

BY MR. KRAEUTER:

Q. Doctor, in this particular case, do you believe you had sufficient information based on the tests that you had at your disposal and your clinical evaluation of Ms. Orr to make the diagnosis that

you've made in this case?

A. Yes.

Q. Okay.

A. I did not see the need for any of these additional tests. And I'm familiar with all these tests except for your alcohol test that I don't know about. But all the other tests I'm familiar with and know how they're used, when they're used, and I did not feel the need to do any extra additional testing to compare what I already had.

MR. MEADER: All right.

MR. KRAEUTER: Okay. Thank you.

(Deposition concluded at 8:05 p.m.)

(Pursuant to Rule 30(e) of the Federal Rules of Civil Procedure and/or O.C.G.A. 9-11-30(e), signature of the witness has been reserved.)

CERTIFICATE OF COURT REPORTER

STATE OF GEORGIA:

COUNTY OF CHATHAM:

I hereby certify that the foregoing transcript was reported as stated in the caption and the questions and answers thereto were reduced to writing by me; that the foregoing 145 pages represent a true, correct, and complete transcript of the evidence given on Monday, June 20, 2016, by the witness, MARKUS NIEDERWANGER, M.D., who was first duly sworn by me.

I certify that I am not disqualified for a relationship of interest under O.C.G.A. 9-11-28(c); I am a Georgia Certified Court Reporter here as an employee of Gilbert & Jones, Inc. who was contacted by Garrett Meader, Esquire, to provide court reporting services for the proceedings; I will not be taking these proceedings under any contract that is prohibited by O.C.G.A. 15-14-37(a) and (b) or Article 7.C. of the Rules and Regulations of the Board; and by the attached disclosure form I confirm that neither I nor Gilbert & Jones, Inc. are a party to a contract prohibited by O.C.G.A. 15-14-37(a) and (b) or Article 7.C. of the Rules and Regulations of the Board.

This 10th day of July, 2016.

_____

Annette Pacheco, CCR-B-2153

DISCLOSURE OF NO CONTRACT

I, Debbie Gilbert, do hereby disclose pursuant to Article 10.B of the Rules and Regulations of the Board of Court Reporting of the Judicial Council of Georgia that Gilbert & Jones, Inc. was contacted by Garrett Meader, Esquire, to provide court reporting services for these proceedings and there is no contract that is prohibited by O.C.G.A. 15-14-37(a) and (b) or Article 7.C. of the Rules and Regulations of the Board for the taking of these proceedings.

There is no contract to provide reporting services between Gilbert & Jones, Inc. or any person with whom Gilbert & Jones, Inc. has a principal and agency relationship nor any attorney at law in this action, party to this action, party having a financial interest in this action, or agent for an attorney at law in this action, party to this action, or party having a financial interest in this action. Any and all financial arrangements beyond our usual and customary rates have been disclosed and offered to all parties.

This 10th day of July, 2016.

_____

Debbie Gilbert, FIRM REPRESENTATIVE
Gilbert & Jones, Inc.

DEPOSITION OF: MARKUS NIEDERWANGER, M.D./AP

I do hereby certify that I have read all questions propounded to me and all answers given by me on June 20, 2016, taken before Annette Pacheco, and that:

_____ 1) There are no changes noted.
_____ 2) The following changes are noted:

Pursuant to Rule 30(e) of the Federal Rules of Civil Procedure and/or the Official Code of Georgia Annotated 9-11-30(e), both of which read in part: Any changes in form or substance which you desire to make shall be entered upon the deposition...with a statement of the reasons given...for making them. Accordingly, to assist you in effecting corrections, please use the form below:

Page No. _____ Line No. _____ should read:_____
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Page No. _____ Line No. _____ should read: _____
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Page No. _____ Line No. _____ should read: _____
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DEPOSITION OF: MARKUS NIEDERWANGER, M.D./AP

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Page No. _____ Line No. _____ should read:_____

Page No. _____ Line No. _____ should read:_____

Page No. _____ Line No. _____ should read:_____

If supplemental or additional pages are necessary, please furnish same in typewriting annexed to this deposition.

_____
MARKUS NIEDERWANGER, M.D.

Sworn to and subscribed before me,
This the _____ day of _____, 20___.

_____
Notary Public
My commission expires: _____

Please forward corrections to:

Gilbert & Jones, Inc.
P. O. Box 14515
Savannah, GA 31416
(912) 355-0320

DEPOSITION OF: MARKUS NIEDERWANGER, M.D./AP

I do hereby certify that I have read all questions propounded to me and all answers given by me on June 20, 2016, taken before Annette Pacheco, and that:

_____ 1) There are no changes noted.
__X__ 2) The following changes are noted:

Pursuant to Rule 30(e) of the Federal Rules of Civil Procedure and/or the Official Code of Georgia Annotated 9-11-30(e), both of which read in part: Any changes in form or substance which you desire to make shall be entered upon the deposition...with a statement of the reasons given...for making them. Accordingly, to assist you in effecting corrections, please use the form below:

Page No. 15 Line No. 23 should read: when I headed out the door, that's

Page No. 16 Line No. 22 should read: delete "otherwise"

Page No. 18 Line No. 11 should read: Stuttgart

Page No. 21 Line No. 7 should read: saw (instead of "knows")

Page No. 23 Line No. 2 should read: characteristics

Page No. 24 Line No. 22 should read: necessarily (instead of "as early")

Page No. 31 Line No. 24 should read: LASP

Page No. 34 Line No. 16 should read: don't want to tell

Page No. 37 Line No. 14 should read: sudomotor (instead of "pseudomotor")

Page No. 37 Line No. 18 should read: -11-

multiple times noted in transcript

DEPOSITION OF: MARKUS NIEDERWANGER, M.D./AP

Page No. 39 Line No. 17 should read: Sudomotor

Page No. 40 Line No. 9 should read: -11-

Page No. 43 Line No. 11 should read: nerve (instead "server")

Page No. 52 Line No. 8 should read: Could (instead of "couldn't")

Page No. 62 Line No. 7 should read: Yet (instead of "that")

Page No. 64 Line No. 13/14 should read: It was thought that the sympathetic nerve system is causing RSD;

Page No. 65 Line No. 10 should read: sudomotor

Page No. 66 Line No. 18 should read: 11

If supplemental or additional pages are necessary, please furnish same in typewriting annexed to this deposition. See additional sheets attached 149/A and 149/B

MARKUS NIEDERWANGER, M.D.

Sworn to and subscribed before me,
This the 3 day of Aug, 2016

Notary Public
My commission expires: 2-17-2020

M. NIKELE DANTZLER NOTARY PUBLIC LIBERTY COUNTY, GEORGIA MY COMMISSION EXPIRES FEBRUARY 17, 2020

Please forward corrections to:

Gilbert & Jones, Inc.
P. O. Box 14515
Savannah, GA 31416
(912) 355-0320

~~148~~ 149/A

DEPOSITION OF: MARKUS NIEDERWANGER, M.D./AP

I do hereby certify that I have read all questions propounded to me and all answers given by me on June 20, 2016, taken before Annette Pacheco, and that:

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Page No. 67 Line No. 22 should read: is medicated through the

Page No. 68 Line No. 20 should read: After "okay" here should be my remark "Are you familiar with that?" towards the attorney and in Line 22 Mr Meador answers "I'm not" and Stoks "Okay go ahead"

Page No. 69 Line No. 23/24 should read: "that is possibly the reason that CRPS does'nt have the "sympathetic" in it anymore

Page No. 78 Line No. 19 should read: joint (instead of "choice")

Page No. 78 Line No. 22 should read: does not account (instead of "is")

Page No. 78 Line No. 19 should read: outside facility

Page No. 83/84 Line No. 3 should read: " (before: she) and " (after: syndrome)

Page No. 90 Line No. 24 should read: at least reported

Page No. 105 Line No. 21 should read: remove " and left"

Page No. 119 Line No. 13 should read: earlier than in the past

~~148~~ 149/B

DEPOSITION OF: MARKUS NIEDERWANGER, M.D./AP

I do hereby certify that I have read all questions propounded to me and all answers given by me on June 20, 2016, taken before Annette Pacheco, and that:

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Page No. 120 Line No. 14 should read: difficult (instead of typical)

Page No. 121 Line No. 12 should read: problems (instead of promise)

Page No. 121 Line No. 18 should read: reassinged

Page No. 125 Line No. 10 should read: And it is not-

Page No. 130 Line No. 18 should read: mirror (instead of mural)

Page No. 131 Line No. 4 should read: mirror

Page No. 135 Line No. 21/22 should read: delete line 21 & 22 (I don't believe I answered as quoted in line 22)

Page No. _____ Line No. _____ should read: _____

Page No. _____ Line No. _____ should read: _____

Page No. _____ Line No. _____ should read: _____